

### REMARKS

This amendment is being filed in reply to the Office Action of September 29, 2003, a reply to which is due, without payment of additional fee or petition for extension of time to respond, by December 29, 2003.

The newly presented claims 21-36, intended to replace originally-presented claims 1-20 are each now limited to:

- (a) inclusion of an opacifying agent in the molded gel matrix icons;
- (b) the air freshener article consisting essentially of (i) a gel matrix body and (ii) fully imbedded within the gel matrix body one or more of the molded gel matrix icons;
- (c) air freshening fragrance contained in both the gel matrix body and the molded gel matrix icons where the average of the  $C \log_{10}P$ 's of the components of the air freshening fragrance in the gel matrix body is about 2.5 and the average of the  $C \log_{10}P$ 's of the components of the air freshening fragrance in the molded gel matrix icons is about 4.5;
- (d) inclusion in both the gel matrix body and the icons of a non-gelling hydrocolloid; and
- (e) the surfactant in the gel matrix body having an HLB in the range of 10-30 and the surfactant in the icons having an HLB value of  $< 10$ .

Furthermore, originally-presented claim 6 dependent on claim 2 has been replaced with newly-presented claim 26 which depends on claim 21, an independent claim.

In paragraphs 2-3, on page 2 of the Office Action of September 29, 2003, claim 6 (now replaced by the newly-presented claim 26) was rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as their invention. The newly presented claim 26, now depends on claim 21, an independent claim which does not contain the

Markush group of additives which are the subject of claim 26. As a result, newly presented claim 26 is respectfully submitted not to be rejectable under 35 USC §112, second paragraph.

On pages 2, 3 and 4 of the Office Action of September 29, 2003, originally-presented claims 1-5 and 7-18, drawn to air-freshening articles, were rejected under 35 USC §§102(e) and 102(b) as being anticipated by Pesu et al, U.S. Patent 6,171,560 or Semoff et al, U.S. Patent 5,679,334.

As a result of the replacement of the original claims 1-18 with newly-presented claims 21-34, containing limitations as set forth supra, and, further, as a result of the averments set forth in the accompanying affidavit of Richard M. Boden under 37 CFR §1.132, it is respectfully submitted that newly-presented claims 21-34 are neither rejectable under 35 USC §102 nor are they rejectable under 35 USC §103.

More specifically, the subject matter of newly-presented claims 21-34 is urged to be patentably distinct from the disclosures of each of the Pesu et al and the Semoff et al references as specifically set forth in the following Table I:

**Table I**

<b>Specific Nature of Subject Matter</b>	<b>Claims 21-34 of above-identified application</b>	<b>The Pesu et al. reference</b>	<b>The Semoff et al. reference</b>
The air-freshening fragrance in the gel matrix body and in the molded gel matrix icons	Average $C \log_{10} P$ 's of components of fragrance in body is 2.5; and in the icons is 4.5	No specific fragrance components or average $C \log P$ 's are set forth	No specific fragrance components or average $C \log P$ 's are set forth
Overall nature of the system	Molded gel matrix icons in gel matrix body, each of which contains air freshening fragrance	Body is two-gel system: A top gel containing decorative icons and a base gel. The top gel contains 'decorative' icons. The decorative icons are not indicated to be molded gel icons the dimensions of which vary directly with the dimensions of the body; or to contain air freshener fragrance	Body is gel system having botanical icons suspended therein. The botanical icons are not indicated to be molded gel icons the dimensions of which vary directly with the dimensions of the body; or to contain air freshener fragrance
Body Structure	Water, surfactant having HLB of 10-30, gel matrix material which can be polysaccharide or hydrolyzed protein gel, non-gelling hydrocolloid and air freshening fragrance	Body is two-gel system, each part of which contains gellan gum. the top gel contains dye.	The body is composed of an aqueous gel, a fragrance, a surfactant and a cosolvent. The gelling agent could be a gellan gum.
Icon Structure	One or more molded gel-matrix icons containing water, surfactant having HLB of < 10, gel matrix material which can be polysaccharide or hydrolyzed protein gel, opacifying agent, non-gelling hydrocolloid and air freshening fragrance	Icons indicated to be 'decorative objects' (reference numeral 40 in Figure 1). No further structural details of icons is disclosed, but observation of Figure 1 clearly shows that the icons are not molded gel matrices.	Icons indicated to be 'color fast and ornamental botanicals' The botanicals are indicated not to contain dyes (Col. 7, lines 15-18)

Indeed, the Pesu et al and Semoff et al references teach away from the subject matter defined according to newly-presented claims 21-34, by indicating that the dye and/or opacifiers are to be contained in the gel body; not in the icon(s). The essence of applicants' invention as defined in the claims resides in the inclusion in the molded gel matrix icons of fixed opacifying agent, e.g., pigments.

In paragraphs 4-6 on pages 4 and 5 of the Office Action of September 29, 2003, originally-presented process claims 19 and 20, replaced herein by newly-presented claims 35 and 36, were rejected under 35 USC §103(a) as being unpatentable over the Pesu et al reference, cited *supra*. The Examiner in charge of the above-identified application stated;

“...Pesu’ steps of preparing the air freshener differs from the recited steps. However, selection of any order of mixing the ingredients is *prima facie* obvious in the absence of new or unexpected results.”

The newly-presented process claims 35 and 36 contain limitations equivalent to the limitations as set forth in newly-presented air freshener article claims 21-34, and the nature of these limitations is specifically set forth *supra*. In view of such additional limitations, and further in view of the averments of Richard M. Boden as set forth in the accompanying Affidavit under 37 CFR §1.132, it is respectfully submitted that newly-presented process claims 35 and 36 define subject matter patentably distinct from the process disclosed by Pesu et al. It is respectfully pointed out to the Examiner in charge of the above-identified application that Dr. Boden avers that he supervised examples wherein, *inter alia*, air freshener products produced according to the teachings of Pesu et al. were compared directly to air freshener products defined according to Examples of the above-identified application 10/015,367.

Thus, the patentable distinction of the subject matter defined according to claims 21-36 over the Pesu et al. and Semoiff et al. references is emphasized by the averments in the Affidavit of Richard M. Boden under 37 CFR §1.132, wherein Dr. Boden avers:

“...8. As a result of his review of the results of the experiments as described in ¶7, *supra*, he has drawn the following conclusions:

- (a) The clear gel matrix air freshener articles containing molded gel matrix icons of the above-identified application as defined in claims 21-34 as set forth in ¶6, *supra*, have superior, unexpected and unobvious air-freshening properties and appearance attributes when compared to the air freshener articles of either of the Pesu et al. or the Semoff et al. references; and
- (b) The process for preparing the clear gel matrix air freshener articles containing molded gel matrix icons of the above-identified application as defined in claims 35 and 36 as set forth in ¶6, *supra*, effect the production of air-freshening articles which have superior, unexpected and unobvious air-freshening properties and appearance attributes when compared to the air freshener articles of the Pesu et al. reference.

9. It is his further conclusion, as a result of his observations as set forth in ¶7, *supra*, that the employment of the articles and processes defined by claims 21 – 36 as set forth in ¶6, *supra*,

gives rise to significantly unobvious, advantageous and unexpected results when compared with the teachings of the Pesu et al. or Semoff et al. references...”

The newly-presented claims 21-36 are respectfully submitted not to be rejectable as being based on new matter under 35 USC §132(a), since each of the added limitations as set forth in the newly-presented claims has basis in the specification of the above-identified application as originally filed. Specifically, the following Table II sets forth (i) the additional limitation and (ii) the particular location in the specification supporting the given limitation in the claim:

**Table II**

<b>Specific Limitation in Newly-Presented Claims</b>	<b>Location in Specification as originally filed supporting specific limitation in newly-presented claims</b>
Gel matrix body containing fragrance, the components of which have an average C log P of about 2.5	Page 4, line 23; Page 23, page 8, line 1; page 11, line 21
Gel matrix icon containing fragrance, the components of which have an average C log P of about 4.5	Page 4, line 24; page 8, line 2; page 11, line 22
Gel matrix body and icon containing non-gelling hydrocolloid	Page 7, lines 14-17
Gel matrix body contains surfactant having HLB value from 10-30	Page 11, lines 3-5
Gel matrix icon contains surfactant having HLB value < 10	Page 11, lines 1 and 2
Gel matrix icons are formed by molding and contain opacifier, e.g., pigment	Page 15, lines 3-6; page 20, lines 23-24

In paragraph 7 on page 5 of the Office Action of September 29, 2003, the Examiner in charge of the above-identified application set forth the following requirement under 37 CFR §1.105:

“Review of the art including the art submitted by applicants provide no art recognized correlation between air freshener and an algorithm as well as the use of an algorithm for the operation of (an) air freshener. Applicants are required to provide literature reference(s) published prior to applicants’ filing date to substantiate art-recognized correlation”.

In compliance with the requirement propounded by the Examiner under 37 CFR §1.105, applicants hereby set forth below, in Table III the following literature references substantiating art-recognized correlation between air fresheners and an algorithm as well as showing the use of an algorithm for operation of air fresheners:

**Table III**

Reference	Location in Reference of Relevant Operable Algorithm and ancillary information
Kydonieus, Agis F., "Controlled Release Technologies: Methods, Theory and Applications" Volume I, CRC Press, Inc., 1980	Pages 21-38, 49-53, 224-227 and 239-246
Van Loveren et al, U.S. Patent 4,387,848 <sup>9</sup> issued on June 14, 1983 ("Method for dispensing...a volatile composition...")	Column 11, line 27 to Column 12, line 57
Van Loveren et al., U.S. Reissue Patent Re. 32, 513 issued October 6, 1987 ("Method for dispensing...a volatile composition...")	Column 11, line 46 – Column 13, line 15
Shefer et al., U.S. Patent 6,042,792 issued March 28, 2000	Column 15, line 37-Column 17, line 5
Shefer et al., U.S. Patent 6,291,371 issued September 18, 2001	Column 13, line 48-column 14, line 64

Copies of the references set forth in Table III are attached hereto.

The foregoing amendments and discussion, the accompanying Affidavit of Richard M. Boden under 37 CFR §1.132, and the discussion and accompanying references in fulfillment of the requirement under 37 CFR §1.105 are respectfully urged to be fully responsive to the Office Action of September 29, 2003 and place this case in condition for allowance.

Accordingly, an early action and allowance of the above-identified application are respectfully solicited.

Respectfully submitted  
INTERNATIONAL FLAVORS & FRAGRANCES INC.

By: \_\_\_\_\_



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In re Application of:  
Virgil A.G. Williams, et al.

Serial No.: 10/015,367

Filed: December 13, 2001

For: "GEL AIR FRESHENER"

)  
) Examiner:  
) Blessing M. Fubara  
)  
) Group Art Unit: 1615  
)  
) Confirmation No: 2791  
)

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AFFIDAVIT OF RICHARD M. BODEN UNDER 37 CFR §1.132

State of New Jersey )  
):ss  
County of Monmouth)

Richard M. Boden, being duly sworn, deposes and says:

1. He is currently employed by INTERNATIONAL FLAVORS & FRAGRANCES Inc., the assignee of the above-identified patent application as Technical Perfume Manager in the Creative Center of International Flavors & Fragrances (IFF-US) located at Hazlet, New Jersey, and he has held that position for a period of three years. Prior to holding that position, from 1978-2000, he held the positions of Research Chemist, Senior Research Chemist and Project Chemist at International Flavors & Fragrances (Research and Development) located in Union Beach, New Jersey.

2. He holds the Ph.D. Degree in Organic Chemistry which he received in 1978 from the University of Rochester, located in Rochester, New York; the M.A. Degree in Chemistry which he received in 1974 from The State University of New York located in Buffalo, New York; and the B.S. Degree in Chemistry which he received in 1971 from the University of California-Berkeley, located in Berkeley, California.

Affidavit of  
Richard M. Boden  
under 37 CFR §1.132  
Serial #10/015,367

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3. He is an inventor and co-inventor on several granted patents and published patent applications both in the United States of America and overseas including the following:

Patent Number	Title
U.S. Patent 6,506,723	Single phase aqueous surfactant-free nontoxic air freshening composition and wick-containing air freshening device using said composition
PCT Published Application WO 0107095	Malodour treatment compositions
U.K. Specification GB 2359750	Malodour treatment composition comprising (hemi)acetal, (hemi)ketal or (mixed)cyclic triacetal obtained by reacting certain aldehydes/ketones
U.S. Patent 6,025,527	Trimethylcyclohexenylcyclopropyl ketones, process for producing same, and uses thereof in perfumery
U.S. Patent 5,583,237	3,5-dimethyl-pentenyl-dihydro-2(3H)-furanone isomer mixtures, organoleptic uses thereof, process for preparing same and process intermediate

4. He has read and is fully familiar with the above-identified Patent Application, Serial Number 10/015,367 filed on December 13, 2001.

5. He is familiar with the U.S. Patent Office Action of September 29, 2003 drafted in connection with the prosecution of the above-identified patent application Serial Number 10/015,367 filed on December 13, 2001 wherein (i) previously-presented claims 1-5 and 7-18 of the above-identified patent application were rejected under 35 USC §102(e) as being anticipated by the disclosure of Pesu et al., U.S. Patent 6,171,560; (ii) previously-presented claims 1-4, 6-13 and 16-18 were rejected under 35 USC §102(b) as being anticipated by Semoff et al., U.S. Patent 5,679,334 and (iii) previously-presented claims 19 and 20 were rejected under 35 USC §103(a) as being unpatentable over Pesu et al., U.S. Patent 6,171,560.

6. He is fully familiar with the newly-presented claims thereof set forth as follows and contained in the amendment accompanying this affidavit, being filed in the United States Patent and Trademark Office:

21. A substantially rigid aqueous clear gel matrix air freshener article consisting essentially of:

- (a) an air freshener gel matrix body having a volume  $V_o$  which decreases on use of said air freshener article whereby  $dV_o/d\theta < 0$  comprising (i) water, (ii) a surfactant having a hydrophile/lipophile balance in the range of from about 10 to about 30, (iii) a clear gel matrix material selected from the group consisting of a polysaccharide gel matrix material and a hydrolyzed protein gel matrix material, (iv) a non-gelling hydrocolloid and (v) a system-compatible air freshening fragrance composition, the components of which have an average  $C \log_{10}P$  of about 2.5, wherein P is the octanol/water partition coefficient for each of the fragrance components;
- (b) fully imbedded within said air freshener body, one or more molded gel matrix icons which are each permanently visibly distinct from said gel matrix body over the range of visible wavelengths when contained within said air freshener gel matrix body, the total volume of which is  $V_I$  which decreases on use of said air freshener article whereby  $dV_I/d\theta < 0$  each of which icon comprises (i) water, (ii) a clear gel matrix material selected from the group consisting of a polysaccharide gel matrix material and a hydrolyzed protein gel matrix material, (iii) a system-compatible air freshening fragrance composition the components of which have an average  $C \log_{10}P$  of about 4.5, wherein P is the octanol/water partition coefficient for each of the fragrance components, (iv) an opacifying agent, (v) a non-gelling hydrocolloid and (vi) a surfactant having a hydrophile/lipophile balance of less than about 10, with the volume fraction of said icons in said air freshener article being  $\phi = V_I / (V_I + V_o)$ , wherein  $0.01 \leq \phi \leq 0.90$ , the physical and chemical properties of each of said icons and said air freshener body being such that on use of said air freshener article, (i) the rate of volumetric reduction of each of said

icons as a result of fragrance emission and water emission therefrom with respect to the volumetric reduction of the air freshener body which envelops said icons as a result of fragrance emission and water emission therefrom is a constant, according to the equations:  $\partial V_1 / \partial V_o = \phi / (1 - \phi)$  and  $\partial^2 V_1 / \partial V_o^2 = 0$ , (ii) the integrity of the fragrance compositions emitted from said air freshener body and said icons is maintained and (iii) the distinguishing visibility of the icons in said air freshener from without said air freshener, at visible wavelengths, is maintained.

22. The air freshener article of claim 21 wherein the air freshener body additionally comprises at least one additive selected from the group consisting of an antimicrobial agent; an anti-oxidant; a chelating agent; a C<sub>2</sub>-C<sub>6</sub> alkylene glycol; a lower alkanol; and a C<sub>2</sub>-C<sub>6</sub> (mono- or di-) alkylene glycol-C<sub>2</sub>-C<sub>4</sub> alkyl ether.

23. The air freshener article of claim 21 wherein the icons additionally comprise at least one additive selected from the group consisting of an anti-microbial agent; an anti-oxidant; a chelating agent; a C<sub>2</sub>-C<sub>6</sub> alkylene glycol; a lower alkanol; and a C<sub>2</sub>-C<sub>6</sub> (mono- or di-) alkylene glycol mono-C<sub>2</sub>-C<sub>4</sub> alkyl ether.

24. The air freshener article of claim 21 wherein the clear gel matrix material is a polysaccharide and the polysaccharide is selected from the group consisting of gellan gum, alkali metal salts of alginic acid, alkaline earth metal salts of alginic acid, and carageenan.

25. The air freshener article of claim 21 wherein the clear gel matrix material is a hydrolyzed protein gel matrix which is gelatin having an isoelectric point of from about 4 up to about 7.

26. *additionally* The air freshener article of claim ~~22~~ wherein the air freshener body comprises an antimicrobial agent, a chelating agent, a lower alkanol, a C<sub>2</sub>-C<sub>6</sub> (mono- or di-) alkylene glycol C<sub>2</sub>-C<sub>4</sub> alkyl ether and a C<sub>2</sub>-C<sub>6</sub> alkylene glycol, and the antimicrobial agent is selected from the group consisting of potassium dimethyldithiocarbamate, glutaraldehyde, 2-bromo-2-nitropropane-1,3-diol, o-phenyl phenol, 1-(3-chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride, N,N'-dimethyl-5,5-dimethoxy-2,4-imidazolidinedione, methylchloroisothiazolinone and methylisothiazolinone; the chelating agent is selected from the group consisting of an alkali metal salt of citric acid, an ammonium salt of citric acid, an alkali metal salt of ethylenediamine tetraacetic acid, an ammonium salt of ethylene diamine tetraacetic acid, an alkali metal salt of N-hydroxyethylenediamine triacetic acid, an ammonium salt of N-hydroxyethylene-diaminetriacetic acid, an alkali metal salt of iminodisuccinic acid, an ammonium salt of iminodisuccinic acid, an alkali metal salt of ethylenediamine disuccinic acid and an ammonium salt of ethylene diamine disuccinic acid; the C<sub>2</sub>-C<sub>6</sub> alkylene glycol is 1,2-propylene glycol; and the C<sub>2</sub>-C<sub>6</sub> (mono- or di-) alkylene glycol C<sub>2</sub>-C<sub>4</sub> alkyl ether is dipropylene glycol-11-butyl ether.

*AMB 10/14/03*  
*VC 10/14/03*

27. The air freshener article of claim 21 wherein the air freshener body is fully surrounded by a clear substantially solid or semi-solid microporous boundary surface permitting passage of water molecules and fragrance composition component molecules therethrough on use of said article.

28. The air freshener article of claim 21 supported by means of an external support comprising a solid base having vertically-disposed solid sidewalls extending therefrom.

29. The air freshener article of claim 21 wherein the surfactant contained in the gel matrix air freshener body is selected from the group consisting of poly (C<sub>2</sub>-C<sub>4</sub> alkylene glycol)<sub>6-30</sub> mono ([C<sub>8</sub>-C<sub>10</sub> alkyl]phenyl)ethers; 1,ω-poly C<sub>2</sub>-C<sub>4</sub> alkylene glycols; poly C<sub>2</sub>-C<sub>4</sub> alkylene glycol mono-C<sub>10</sub>-C<sub>20</sub>

alkanoic acid esters; poly C<sub>2</sub>-C<sub>4</sub> alkylene glycol sorbitan mono-C<sub>10</sub>-C<sub>20</sub> alkanolic acid esters; poly C<sub>2</sub>-C<sub>4</sub> alkylene glycol tallow amines; poly C<sub>2</sub>-C<sub>4</sub> alkylene glycol esters of tall oil fatty acids; and poly C<sub>2</sub>-C<sub>4</sub> alkylene glycol mono-C<sub>10</sub>-C<sub>20</sub> alkyl ethers.

30. The air freshener article of claim 21 wherein the opacifying agent contained in the icons is selected from the group consisting of iron oxide yellow, iron oxide cosmetic russet, cloisonne super rouge, cloisonne super rouge with polyflake, graphitol blue powder, graphitol green powder, titanium dioxide and Lake colors.

31. The air freshener article of claim 21 wherein the weight percent of water in said article is from about 50% up to about 90% of said article; the weight percent of clear gel matrix material is from about 0.1% up to about 10% by weight of said article; the weight percent of system-compatible fragrance in said article is from about 0.1% up to about 20% by weight of said article and the weight percent of surfactant in said article is from about 0.1% up to about 25% by weight of said article.

32. The air freshener article of claim 21 wherein on use of said article, the operation of the air freshener article is in accordance with the algorithm:

$$\int \{ (v_I [\partial c_I / \partial \theta] - V_o [\partial c_o / \partial \theta] + c_I [\partial V_I / \partial \theta] - c_o [\partial V_o / \partial \theta]) d\theta \} \\ = k_1 \Delta(c_o V_o) + (1 - \phi) \iint [\partial E_o / \partial V_o] dV_o d\theta + \phi \iint [\partial E_I / \partial V_I] dV_I d\theta$$

wherein  $V_I$  is the total volume of the icons at time  $\theta$ ;

wherein  $V_o$  is the air freshener body volume at time  $\theta$ ;

wherein  $c_I$  is the average perfume composition component concentration in gram-moles per liter in all of the icons at time  $\theta$ ;

wherein  $c_o$  is the average perfume composition component concentration in gram-moles per liter in the air-freshener body at time  $\theta$ ;

wherein  $E_o$  is the elastic modulus of the air freshener body at time  $\theta$ ;

wherein  $E_I$  is the average elastic modulus of each of the icons at time  $\theta$ ;

wherein  $k_1$  is a constant; and

wherein  $\phi$  is the volume fraction of the icons.

33. The air freshener article of claim 21 wherein on use of said article, the operation of the air freshener article is in accordance with the algorithm:

$$\Delta(V_o^{-1/2}) + \Delta(V_I^{-1/2}) - \Delta(\ln c_I) - \Delta(\ln c_o) = -k_2(\Delta\theta)$$

wherein  $V_I$  is the total volume of the icons at time  $\theta$ ;

wherein  $V_o$  is the air freshener body volume;

wherein  $c_I$  is the average perfume composition component concentration in gram-moles per liter in all of the icons at time  $\theta$ ;

wherein  $c_o$  is the average perfume composition component concentration in gram-moles per liter in the air freshener body at time  $\theta$ ; and

wherein  $k_2$  is a constant.

34. The air freshener article of claim 21 wherein on use of said article, the operation of the air freshener article is in accordance with the algorithm:

$$(c_{I2}c_{o2})/(c_{I1}c_{o1}) = \exp[k_2\Delta\theta + \Delta(V_o^{-1/2}) + \Delta(V_I^{-1/2})]$$

wherein  $V_I$  is the total volume of the icons at time  $\theta$ ;

wherein  $V_o$  is the total air freshener body volume at time  $\theta$ ;

wherein  $c_{I1}$  is the average perfume composition component concentration in gram-moles per liter in all of the icons at time  $\theta_1$ ;

wherein  $C_{12}$  is the average perfume composition component concentration in gram-moles per liter in all of the icons at time  $\theta_2$ ;

wherein  $C_{01}$  is the average perfume composition component concentration in gram-moles per liter in the air freshener body at time  $\theta_1$ ;

wherein  $C_{02}$  is the average perfume composition component concentration in gram-moles per liter in the air freshener body at time  $\theta_2$ ; and

wherein  $k_2$  is a constant.

35. A process for preparing the air freshener article of claim 21 comprising the steps of:

- (a) providing at least one molded gel matrix icon containing an opacifying quantity of a pigment;
- (b) cooling said icon to a temperature below the freezing point thereof;
- (c) providing said air freshener body in the liquid phase; and
- (d) immersing said icon in said air freshener body.

36. The process of claim 35 comprising the steps of :

- (a) admixing the clear gel matrix material with water at a temperature in the range of from about 65°C. up to about 80°C. to form an aqueous gel matrix solution;
- (b) dividing the resulting solution into two portions: (i) an "icon" portion; and (ii) a "body" portion, the volume fraction  $\phi$  of the "icon" portion being  $\phi = V_I' / (V_O' + V_I')$ ; wherein  $0.01 \leq \phi \leq 0.90$  and wherein  $V_I'$  is the volume of the "icon" portion and  $V_O'$  is the volume of the "body" portion;
- (c) maintaining the "body" portion in the liquid state at a temperature of from about 65°C. up to about 80°C.
- (d) pouring the "icon" portion into one or more icon molds;
- (e) adding an opacifying quantity of one or more of the same or different pigments to one or more of the icon molds containing the "icon" portion while the "icon" portion is in the liquid state;

(f) cooling the "icon" portion to a temperature below the solidification temperature of the "icon" portion whereby one or more frozen icons in the solid state are formed;

(g) removing the one or more frozen icons in the solid state from the one or more icon molds;

(h) permanently submerging the entirety of the one or more frozen icons in the "body" portion whereby the one or more frozen icons is suspended in the "body" portion; and

(i) within a time period sufficiently short in length to prevent the melting of the one or more suspended icons, cooling the resulting suspension to a temperature in the range of from about 10°C. up to about 30°C. whereby the resulting suspension is transformed to the solid or semi-solid phase.

7. He has supervised the carrying out of the following examples which compare (a) air freshener articles which are covered by the prior art cited in the Office Action of September 29, 2003 with (b) the subject matter of the invention of the above-identified application as defined according to the claims 21-36 as set forth in ¶6, supra:

#### **EXAMPLE A**

The example of Semoff et al., U.S. Patent 5,679,334 set forth at Column 7, lines 30-67 and Column 8, 1-17 is carried out wherein the average value of the  $C \log_{10}P$  of the components of the air freshener fragrance added in Part D at Column 7, lines 49-53 is 6.

#### **EXAMPLE B**

The Example of Pesu et al., U.S. Patent 6,171,560 as set forth at Column 2, lines 64-67, Column 3, lines 1-67 and Column 4 lines 1-40 is carried out wherein the average value of the  $C \log_{10}P$  of the components of the air freshener fragrance added at Column 3, line 42 is 6.



# EXAMPLES C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9 and C-10

Examples 1-10 of the above-identified application, serial number 10/015,367 filed December 13, 2001 were repeated, as set forth in said application, wherein, in each Example, the average of the  $C \log_{10}P$  values of the components of the fragrance added to the clear "body" gel matrix is 2.5 and the average of the  $C \log_{10}P$  values of the components of the fragrance added to the clear "icon" gel matrix is 4.5 The Examples 1-10 of Application 10/015,367 corresponding to Examples C-1 – C-10 are as follows:

Comparison Example Number	Example Number of Application 10/015,367
C-1	1
C-2	2
C-3	3
C-4	4
C-5	5
C-6	6
C-7	7
C-8	8
C-9	9
C-10	10

## TABLE OF RESULTS

In each case, the article of the aforementioned examples is placed on a horizontally-positioned planar platform located in the center of a 15' x 20' x 8' (height) room maintained at a temperature in the range of 22-28°C. In each case, the values given are scaled on a scale of 1-10 with a value of "10" showing the most desirable effect and a value of "1" showing the least desirable effect.

Example	Icon Visibility and Appearance		Quality of Air Freshening Effect at end of period		Clarity of Air Freshener Article at end of period		Strength of Air Freshening Fragrance in room at end of period	
	on use for 24 hours	on use for 8 days	on use for 24 hours	on use for 8 days	on use for 24 hours	on use for 8 days	on use for 24 hours	on use for 8 days
A	3.5	2.5	2.5	1.5	5.0	1.5	1.5	1
B	4.0	1.5	3.0	1.5	4.5	2.0	1.5	1
C-1	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-2	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-3	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-4	9.5	8.5	10.0	9.0	10.0	9.0	10.	9.5
C-5	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-6	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-7	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-8	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-9	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5
C-10	9.5	9.0	10.0	9.0	10.0	10.0	10.	9.5


8. As a result of his review of the results of the experiments as described in ¶7, *supra*, he has drawn the following conclusions:

- (a) The clear gel matrix air freshener articles containing molded gel matrix icons of the above-identified application as defined in claims 21-34 as set forth in ¶6, *supra*, have superior, unexpected and unobvious air-freshening properties and appearance attributes when compared to the air freshener articles of either of the Pesu et al. or the Semoff et al. references; and
- (b) The process for preparing the clear gel matrix air freshener articles containing molded gel matrix icons of the above-identified application as defined in claims 35 and 36 as set forth in ¶6, *supra*, effect the production of air-freshening articles which have

superior, unexpected and unobvious air-freshening properties and appearance attributes when compared to the air freshener articles of the Pesu et al. reference.

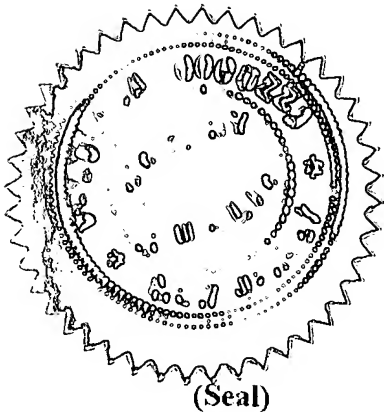
9. It is his further conclusion, as a result of his observations as set forth in ¶7, *supra*, that the employment of the articles and processes defined by claims 21 – 36 as set forth in ¶6, *supra*, gives rise to significantly unobvious, advantageous and unexpected results when compared with the teachings of the Pesu et al. or Semoff et al. references.

FURTHER DEPONENT SAITH NOT.

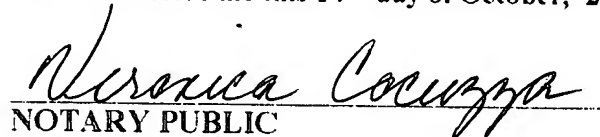


Richard M. Boden

October 14, 2003



Sworn to before me this 14<sup>th</sup> day of October, 2003

  
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VERONICA COCUZZA  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires Aug. 5, 2008